USDA, National Agricultural Statistics Service

Indiana Crop & Weather Report

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CROP REPORT FOR WEEK ENDING AUGUST 7

AGRICULTURAL SUMMARY

Scattered thunderstorms brought temporary drought relief to some areas but the state remains very dry in general, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. The prevailing hot, dry conditions are causing a growing concern over the impact it will have on crop yields. Some soybean fields required spraying during the week due to pressure from weeds, aphids and/or spider mites. Aerial fungicide applications continued on some corn acreage. Many farm families were busy preparing 4-H projects for the state fair.

FIELD CROPS REPORT

There were 6.2 **days suitable for field work**. Ninety-three percent of the **corn** crop has **silked** compared with 97 percent last year and 93 percent for the 5-year average. By region, 93 percent has silked in the north, 94 percent central and 91 percent in the south. Twenty-four percent of the corn is in **dough** compared to 62 percent last year and 39 percent for the 5-year average. **Corn condition** is rated 41 percent good to excellent compared with 65 percent last year at this time.

Eighty percent of the **soybean** acreage is **blooming** compared with 93 percent last year and 85 percent for the 5-year average. By region, 86 percent has bloomed in the north, 77 percent central and 76 percent in the south. Thirty-eight percent of the soybean acreage is **setting pods** compared with 72 percent last year and 50 percent for the 5-year average. **Soybean condition** is rated 44 percent good to excellent compared with 65 percent last year at this time.

Major activities during the week included: applying herbicides and fungicides, cutting and baling hay, spraying for aphids and spider mites, monitoring irrigation systems, harvesting vegetable crops, mowing roadsides and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition declined further and is now rated 25 percent good to excellent compared with 54 percent last year. The **second cutting** of **alfalfa hay** is nearing completion and the **third cutting** is 15 percent complete compared with 37 percent last year and 24 percent for the 5-year average. High temperatures continued to stress **livestock** with some death loss reported.

CROP PROGRESS

Crop	This Week	Last Week	Last Year	5-Year Avg.
	Percent			
Corn Silked (Tasseled)	93	81	97	93
Corn in Dough	24	8	62	39
Soybeans Blooming	80	66	93	85
Soybeans Setting Pods	38	22	72	50
Alfalfa, Second Cutting	98	91	98	96
Alfalfa, Third Cutting	15	NA	37	24

CROP CONDITION

Crop	Very Poor	Poor	Fair	Good	Excel-lent
	Percent				
Corn	6	15	38	34	7
Soybean	6	13	37	37	7
Pasture	9	26	40	22	3

SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK

Soil Moisture	This Week	Last Week	Last Year
	Percent		
Topsoil			
Very Short	23	19	6
Short	46	44	30
Adequate	30	35	59
Surplus	1	2	5
Subsoil			
Very Short	15	10	4
Short	43	37	26
Adequate	41	52	66
Surplus	1	1	4
Days Suitable	6.2	6.3	5.7

CONTACT INFORMATION

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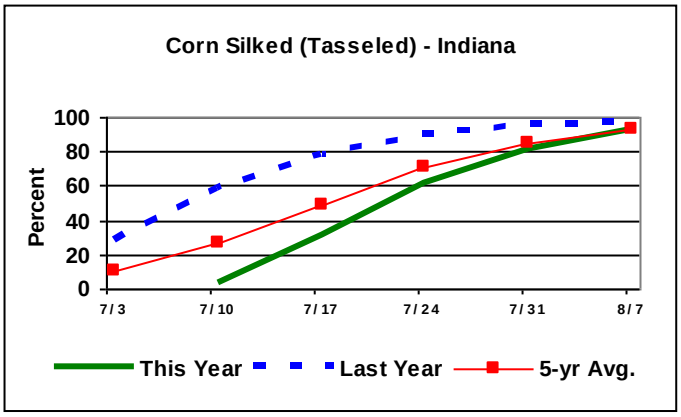
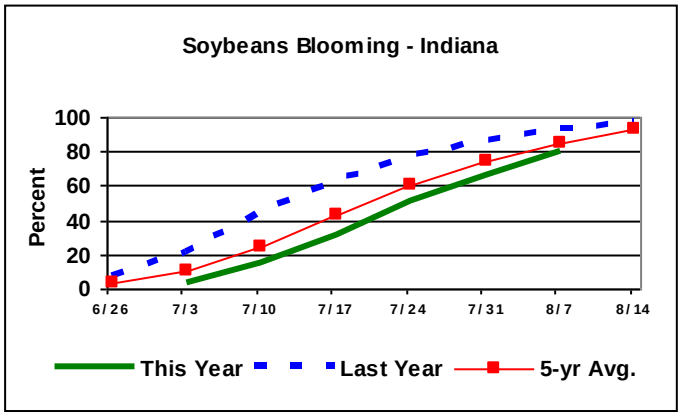
http://www.nass.usda.gov/Statistics_by_State/Indiana/





Other Agricultural Comments And News

An Example of "Recovery" From Severe Root-Lodging

A thunderstorm with strong winds flattened hundreds of acres in eastern Indiana late in the afternoon of 22 July as a result of plants being partially uprooted. The appearance of damaged fields the morning after was demoralizing to growers and casual observers alike.

However, because many of these fields were planted extremely late due to a wet planting season, the plants were still in the late vegetative phase of development (1 to 2 weeks before tasseling) and, most importantly, still in the process of stalk elongation. Root-lodged stalks that are still elongating can respond to such root-lodging by slowly bending or "goose-necking" in an attempt to regain an upright stance. Such "goose-necking" is the result of changes in the distribution of plant growth hormones in the stalk tissue that cause more rapid elongation on the bottom side of the nearly horizontal stalks than on the top side.

As long as root damage caused by the lodging is not extreme and there is adequate soil moisture to foster additional root development during the recovery period, flattened fields of corn at these growth stages can "recover" fairly well. I put the word "recover" in quotes because severely root-lodged fields will usually not recover completely. However, if the damaged plants can goose-neck sufficiently and quickly enough by the time the field moves into the critical tassel/silk pollination period such that the portion of the stalk containing the silked ears is again upright, then pollination will likely be successful.

The three photos accompanying this article are from a 30-acre field at the Davis-Purdue Ag Center in Randolph County. The storm moved through the area late in the afternoon of 22 July and severely flattened hundreds, if not thousands, of corn acres in the area. The field had been planted 3 June, much later than desired because of the frustratingly late, wet planting season. However, the good news was that plant development was consequently delayed relative to the calendar and the field was still about one week away from tasseling and pollination. I say "good news" because the plants were still in their rapid growth phase with stalks still rapidly elongating.

The first photo shows the appearance of the damaged field the morning after the storm. I estimated 80-90% of the plants were root-lodged and nearly flat to the ground.

The second photo shows the same field six days late on 28 July and the change in appearance is amazing. Dramatic bending of the horizontal lower stalk tissue resulted in "goose-necked" plants and, more importantly, enough upright growth to place the silking ears in a position to be exposed to pollen from the tassels.

Time will tell to what extent yield will be decreased and, unfortunately, there is no good comparison to even determine how much yield will be lost. With the hope that weather conditions during grain filling improves, the next big challenge will be harvesting the crop because of the difficulty of moving the combine header through the yet root-lodged lower portions of the crop canopy.

Related reading

Nielsen, RL (Bob) Nielsen. 2011. Prospects of Recovery for Root-Lodged Corn. Corny News Network, Purdue Univ Extension. [online] Available at:
http://www.kingcorn.org/news/articles.11/FlatCorn-0726.html
[URL accessed July 2011].

Weather Information Table

Week Ending Sunday, August 7, 2011

Station	Past Week Weather Summary Data							Accumulation				
								April 1, 2011 through August 7, 2011				
	Air Temperature				Precip.		Avg 4 in Soil	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days	Temp	Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	90	61	76	+4	0.54	1		23.74	+7.63	54	2069	+25
Francesville	90	60	77	+6	0.45	2		22.87	+6.78	57	2062	+181
Valparaiso_AP_I	90	62	78	+6	0.39	2		21.15	+4.27	55	2094	+245
Wanatah	92	59	75	+4	0.56	4	83	24.82	+8.38	70	1860	+92
Winamac	92	63	78	+6	0.63	3		25.66	+9.57	68	2009	+128
North Central (2)												
Plymouth	92	61	76	+4	0.61	2		24.03	+7.29	62	2059	+96
South_Bend	91	62	79	+7	0.21	2		22.23	+6.47	64	2152	+317
Young_America	91	63	78	+6	0.57	3		21.90	+6.36	48	2154	+228
Northeast (3)												
Fort_Wayne	95	65	80	+8	0.34	2		18.30	+3.67	57	2349	+428
Kendallville	91	64	77	+6	0.82	2		23.31	+7.97	77	2069	+264
West Central (4)												
Greencastle	91	59	76	+2	0.13	1		24.17	+5.72	57	2156	-15
Perrysville	95	60	80	+7	0.00	0	91	18.92	+1.37	49	2364	+330
Spencer_Ag	94	62	79	+6	0.60	1		24.04	+5.18	52	2365	+322
Terre_Haute_AFB	94	60	80	+6	0.01	1		23.57	+5.81	57	2525	+357
W_Lafayette_6NW	92	58	78	+6	0.50	1	85	24.57	+8.40	54	2256	+333
Central (5)												
Eagle_Creek_AP	94	65	81	+7	0.00	0		20.17	+3.59	56	2559	+411
Greenfield	95	64	79	+6	0.27	1		24.87	+6.60	62	2368	+315
Indianapolis_AP	96	64	83	+8	0.00	0		19.18	+2.60	52	2626	+478
Indianapolis_SE	95	62	79	+5	0.04	2		25.15	+7.88	56	2303	+174
Tipton_Ag	93	63	78	+6	0.81	1	87	24.69	+8.28	56	2221	+355
East Central (6)												
Farmland	93	64	79	+8	1.59	3	87	19.90	+3.81	63	2238	+420
New_Castle	92	61	77	+5	0.85	2		26.85	+9.17	53	2171	+313
Southwest (7)												
Evansville	96	68	83	+6	0.33	1		33.18	+16.09	49	2907	+397
Freelandville	94	65	80	+5	0.03	1		23.86	+6.12	44	2620	+379
Shoals_8S	95	60	78	+4	0.60	1		29.93	+10.70	45	2469	+311
Stendal	93	66	80	+4	1.02	3		38.99	+20.05	50	2665	+310
Vincennes_5NE	95	66	81	+6	0.16	1	87	31.84	+14.10	49	2680	+439
South Central (8)												
Leavenworth	94	67	80	+6	0.41	2		31.16	+11.64	59	2639	+486
Oolitic	93	63	79	+5	2.00	1	87	34.21	+15.91	55	2353	+294
Tell_City	95	69	81	+5	0.66	2		31.76	+12.46	48	2748	+362
Southeast (9)												
Brookville	97	65	80	+7	1.22	3		25.26	+7.57	55	2449	+501
Greensburg	95	64	80	+8	0.95	2		28.11	+10.36	51	2547	+539
Seymour	92	62	78	+5	0.88	2		28.88	+11.17	48	2368	+297

DFN = Departure From Normal.
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

For more weather information, visit www.awis.com or call 1-888-798-9955.

Soybean Aphid: Starting to Show Up in Northern Indiana Soybean (but do not panic yet)

Written by Christian Krupke and John Obermeyer, Purdue University. Article appears in the Pest & Crop, Issue 17, July 29, 2011.

- Aphids, though mostly low levels, are beginning to be found in many fields.
- Recent rains, moderate temperatures, and soybean growth spurt may favor aphids.
- Concentrate scouting effort on the new growth in the upper soybean canopy.

Reports have just come in of soybean aphids beginning to establish in the new growth of soybean foliage. Although there have been rumored fields over threshold and being treated, those contacting us (thanks to Troy Jenkins and Dan Childs) have only seen low numbers, but aphids are being found on the majority of the plants. This certainly indicates that scouting soybean fields should begin in earnest immediately. We are able to find aphids in many fields around Tippecanoe County, but again numbers are very low and have a lot of building to do to reach threshold before the R6 stage.

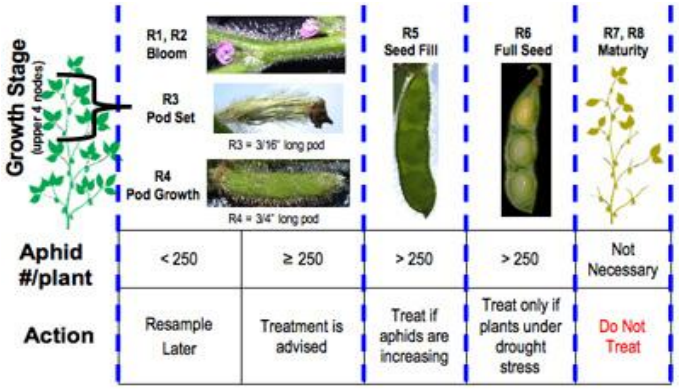
New soybean growth being colonized by aphids, note the adult female giving live birth.

As we stated in earlier Pest & Crop issues, aphids have been relatively scarce this year. Since numbers in the upper Midwest haven't flared, we don't suspect that winged aphids have migrated from those areas and descended on Indiana. To support that, those finding aphids are not seeing many with wings. The extreme heat last week and in the latter part of this week is not helpful for aphid survival and reproduction. They don't die as a result of the heat, but they do not reproduce very quickly at temperatures in excess of 90 degrees. It is likely that recent rains and more tolerable temperatures have spurred on the few aphids that lurked in the canopy unnoticed.

The rains have certainly encouraged new growth in soybean. That new growth is rich in nutrients that favor aphid fecundity and development. Soybean fields that are in the early R growth stages, especially in the northern counties, should be scouted soon. Concentrate on the backsides of new growth in the upper canopy and on the newly developing pods. Again, the vast majority of Indiana soybean fields have virtually no aphids in them. However, they are out there and some populations will be increasing and marching toward the magic number of 250 aphids/plant. Don't let your fields be among those that are not scouted until they are over threshold – take the time for a quick survey of 20 plants throughout the field.

Be certain to look for aphids on the backside of soybean's newest growth.

Use the following treatment threshold guide determined by soybean growth stage:



Treatment threshold guide determined by soybean growth stage

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